

What is claimed is:

1. A network management system comprising:

a plurality of nodes;

a recording medium apparatus for storing data;

5 data management means for managing the data of said recording medium apparatus; and

access management means for managing access to the data of said recording medium apparatus; wherein

10 said plurality of nodes, said recording medium apparatus, said data management means, and said access management means are connected through a network.

2. A network management system comprising:

a plurality of nodes;

a recording medium apparatus for storing data;

15 data management means for managing data of said recording medium apparatus;

access management means for managing access to data of said recording medium apparatus; and

20 access channel management means for controlling access channel by controlling said access management means; wherein said plurality of nodes, said recording medium apparatus, said data management means, and said access management means are connected through a network and an access channel is controlled by said access channel management means.

25 3. The network management system of claim 1, wherein said nodes query said access management means, in accessing said recording medium apparatus, whether or not the access can be approved, and act in accordance with the response of said access management means.

30 4. The network management system of claim 2, wherein said nodes query said access management means, in accessing said recording medium apparatus, whether or not the access can be approved, and act in accordance with the response of said access

management means.

5        5. The network management system of claim 1, wherein said access management means is provided with an access state managing function for managing mode of access judgment, band of the network, and band of an interface of said recording medium apparatus.

10       6. The network management system of claim 2, wherein said access management means is provided with an access state managing function for managing mode of access judgment, band of the network, and band of an interface of said recording medium apparatus.

15       7. The network management system of claim 5, wherein said access management means is provided with an access judgment function of judging, when an access request to data has been received from any one of the nodes, whether or not to approve the access based on information from said access state managing function, and sending back the result of judgment.

20       8. The network management system of claim 6, wherein said access management means is provided with an access judgment function of judging, when an access request to data has been received from any one of the nodes, whether or not to approve the access based on information from said access state managing function, and sending back the result of judgment.

25       9. The network management system of claim 5, wherein said access management means is provided with a function of sending, when sending access approval as a result of judging whether or not to approve the access, said result of judgment after securing a transmission band for accessing.

30       10. The network management system of claim 6, wherein said access management means is provided with a function of sending, when sending access approval as a result of judging whether or not to approve the access, said result of judgment after securing a transmission band for accessing.

11. The network management system of claim 2, wherein said access management means controls said access channel management means and is provided with a function of establishing an access channel, a function of managing load status of the network, and a function of acquiring said network load status as stored in said access channel management means.

12. The network management system of claim 5, wherein said access management means is provided with a function in which a predetermined node secures in advance a transmission band required for access to a recording medium apparatus allocated to said predetermined node.

13. The network management system of claim 6, wherein said access management means is provided with a function in which a predetermined node secures in advance a transmission band required for access to a recording medium apparatus allocated to said predetermined node.

14. The network management system of claim 1, wherein said node sends, in accessing said recording medium apparatus, an access request to said access management means, and upon receiving it, said access management means sends to said data management means a request for information pertaining to data or said recording medium apparatus, and upon receiving it, said access management means makes judgment as to whether or not to approve the access.

15. The network management system of claim 2, wherein said node sends, in accessing said recording medium apparatus, an access request to said access management means, and upon receiving it, said access management means sends to said data management means a request for information pertaining to data or said recording medium apparatus, and upon receiving it, said access management means makes judgment as to whether or not to approve the access.

16. The network management system of claim 1, wherein said

access management means is provided in at least either one of said recording medium apparatus or said node.

17. The network management system of claim 2, wherein said access management means is provided in at least either one of  
5 said recording medium apparatus or said node.

18. The network management system of claim 1, wherein said data management means is provided in a node or a recording medium apparatus within a network.

19. The network management system of claim 2, wherein said  
10 data management means is provided in a node or a recording medium apparatus within a network.

20. The network management system of claim 2, wherein said access management means is provided with a function of controlling access channel management means and cutting off  
15 access channel.

21. The network management system of claim 2, wherein said access channel management means is provided with a function of controlling configuration and access state of a network connected to each port of said access channel management means.

22. A network management system comprising:  
a plurality of nodes;  
a recording medium apparatus for storing data; and  
data management means for managing data on said recording  
medium apparatus; wherein  
25 said plurality of nodes, said recording medium apparatus, and said data management means are connected through a network, and a predetermined node (or) said data management means manages data management information on said data separately from said data thereby to allow deletion of only the data management  
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30 information when said predetermined node deletes said data.

23. The network management system of claim 22, wherein access to the data deleted by a predetermined node is made accessible from a node other than said node.

24. The network management system of claim 1, wherein said recording medium apparatus is divided into video and audio sections each of which respectively using a separate file system.

5        25. The network management system of claim 2, wherein said recording medium apparatus is divided into video and audio sections each of which respectively using a separate file system.

10       26. The network management system of claim 22, wherein said recording medium apparatus is divided into video and audio sections each of which respectively using a separate file system.

15       27. The network management system of claim 1, wherein said data management means is provided with a function of receiving newly generated management information each time writing or deleting of data on the recording medium apparatus is made, and internally reflecting it.

20       28. The network management system of claim 2, wherein said data management means is provided with a function of receiving newly generated management information each time writing or deleting of data on the recording medium apparatus is made, and internally reflecting it.

25       29. The network management system of claim 22, wherein said data management means is provided with a function of receiving newly generated management information each time writing or deleting of data on the recording medium apparatus is made, and internally reflecting it.

30       30. The network management system of claim 1, wherein said data management means is provided with functions of managing and of sending system configuration information of the network.

31. The network management system of claim 2, wherein said data management means is provided with functions of managing and of sending system configuration information of the network.

32. The network management system of claim 22, wherein said data management means is provided with functions of managing and of sending system configuration information of the network.

5        33. The network management system of claim 1, wherein said data management means is provided with a function of sending management information based on a request from a node.

10       34. The network management system of claim 2, wherein said data management means is provided with a function of sending management information based on a request from a node.

      35. The network management system of claim 22, wherein said data management means is provided with a function of sending management information based on a request from a node.